EA2010 Post Equalizing Video Amplifier

Installation/Operation Manual C630M Rev A (8/90)

1.0 WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by Qualified Service Personnel and conform to all Local codes.

2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.

4. Only use replacement parts recommended by Pelco.

5. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.

2.0 SCOPE

The information contained within this manual covers the EA2010 Post Equalizing Video Amplifier.

3.0 DESCRIPTION

The Pelco EA2010 provides a low cost, highly effective means of maintaining CCTV picture quality in runs of up to 3000 feet (914.4 m) of RG59 cable.

Through panel controls provided for adjustable overall amplifier flat gain of 1 to +8 dB plus adjustable high frequency boost of 0 dB to greater than 18 dB at 12 MHz, mainlining full video amplitude, contrast and detail.

The EA2010 features all solid-state circuitry and is supplied with a U.L. Listed wall transformer. Applications should be for POST-EQUALIZATION only (located near the monitoring equipment); use as a pre-equalizer is discouraged.

Pelco • 300 W. Pontiac Way, Clovis, CA 93612-5699 • USA • (800) 289-9100 or (1-559) 292-1981
FAX (800) 289-9150 or (1-559) 292-3827 • DataFAX (800) 289-9108 or (1-559) 292-0435
International customers call (1-559) 292-1981 or FAX (1-559) 348-1120

3.1 OPTIONS

DT200 — Dual desktop mount kit; two units can be mounted side-by-side in one desktop chassis.

R300 — Rack mounting kit. Up to three (3) units may be racked horizontally In a single rack kit. Blank filler panels provided for use when less than three units are racked.

4.0 OPERATION

Optimum performance Is achieved if an oscilloscope a standard EIA resolution chart are used in making gain and boost adjustments. The (GAIN control should be adjusted for an output level of 1 volt p-p and the L.F. BOOST control should be adjusted for minimum tilt during sync pulses. The H.F. BOOST control is then adjusted for optimum resolution wedge reproduction.

If the use of a resolution chart is precluded, the H.F. BOOST control should be adjusted for maximum sharpness of sync pulse edges—without overshoot.

In the absence of an oscilloscope, a less precise (but often equally satisfactory) adjustment can be made as follows:

1. Set the GAIN and BOOST controls approximately 1/3 turn from fully counterclockwise.

2. Adjust GAIN control for satisfactory overall picture contrast.

3. Adjust L.F. BOOST control for optimum detail. Too much boost (clockwise) can cause picture instability and/or smearing (trail).

4. Adjust the H.F. BOOST control to further optimize picture detail. Note that the effectiveness of this control is hardly perceptible unless very fine picture detail is present in the camera signal output. An excessive setting of this control (clockwise) can, however, increase picture noise.

Refer to Figure 1 for a typical system configuration.

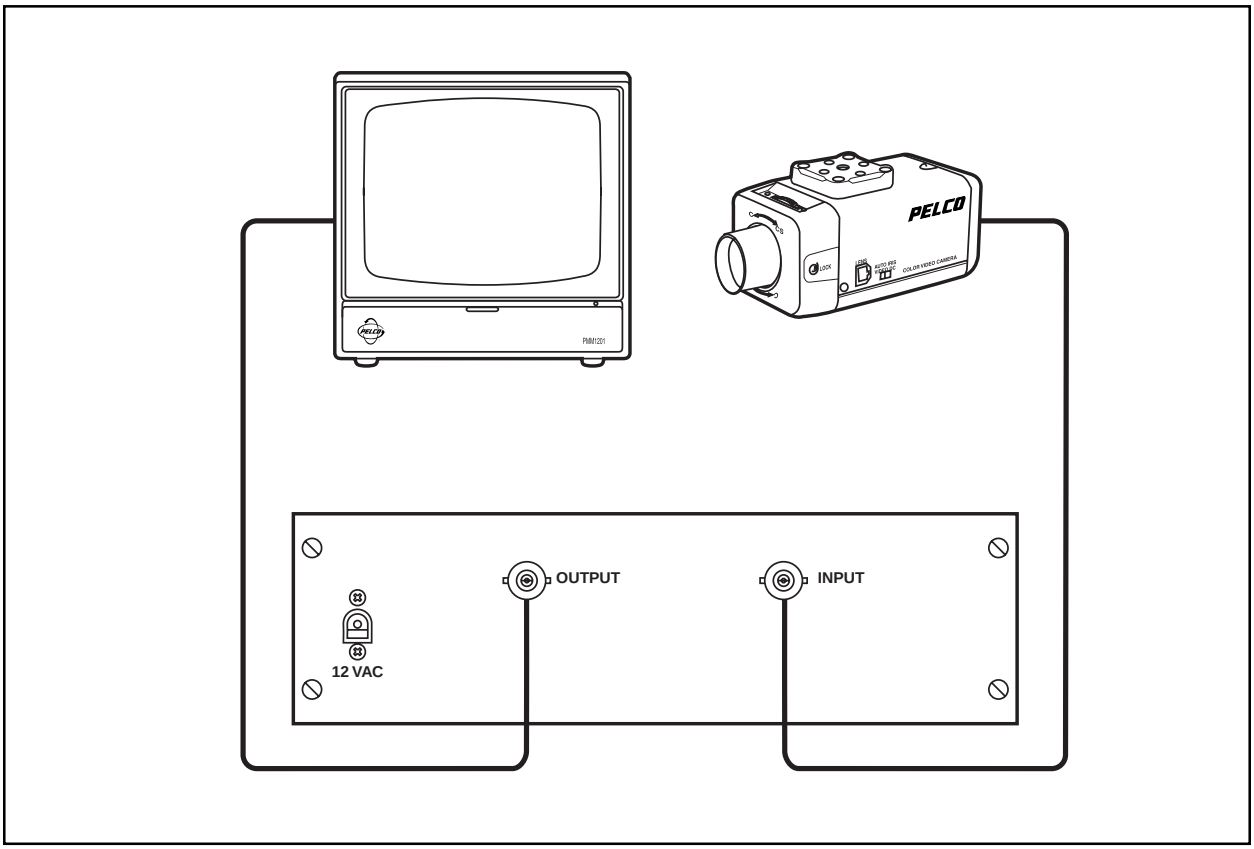

Figure 1. Typical System Configuration

5.0 SPECIFICATIONS

MECHANICAL

Recessed Screwdriver Adjustments: Gain, HF Boost, LF Boost

ELECTRICAL

Input Voltage: 120 VAC, 50/60 Hz (230 VAC, 50 Hz optional)

Power Requirements for Transformer: 1.5 vA (.125 amp) at 12 ±15% volts RMS 50/60 Hz from a dedicated, isolated power supply

Inputs: Single BNC internally terminated in 75 ohms

Outputs: Single BNC source terminated

Gain: Adjustable from 1 to +8 dB

Frequency Response: Adjustable from flat (±1 dB) at 12 MHz, to greater than 18 dB of boost at 12 MHz

Output Dynamic Range: Up to 2 volts p-p at 50% APL
Up to 1.5 volts p-p at 90% APL

Cable Lengths:

Cable Type	Maximum Effective Distance
RG59	3,000 feet (914.4 m)
RG6	4,500 feet (1,371.6 m)
RG11	6,000 feet (1,828.8 m)
RG15	8,000 feet (2,438.4 m)

GENERAL

Environment: 32° to 120° F (0° to 48.89° C)
0-90% relative humidity

Construction:
Cover: Steel, black polyester powder coat
Chassis: Steel, zinc plated
Panel: Aluminum, black polyester powder coat with white silkscreen

Dimensions: See Figure 2

Weight: 3 lbs (1.35 kg)

Shipping Weight: 4 lbs (1.8 kg)

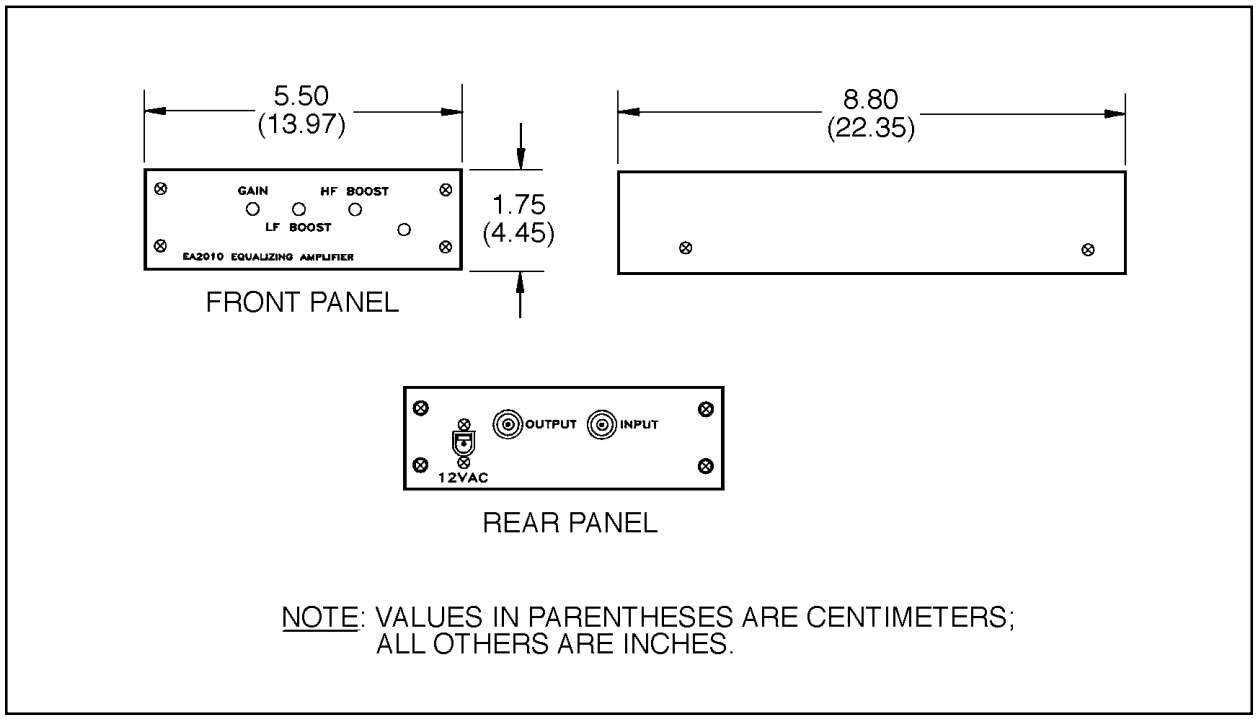

Figure 2. EA2010 Dimension Drawing

6.0 WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one (1) year after the date of shipment. Exceptions to this warranty are as noted below:

- Four (4) years on all standard motorized and fixed focal length lenses.
- Two (2) years on Legacy®, Intercept®, CM8500/CM9500/CM9750 Matrix and DF8 Fixed Dome products.
- Two (2) years on WW5700 series window wiper (excluding wiper blades).
- Two (2) years on cameras.
- Six (6) months on all pan and tilts, scanners or preset lenses used in continuous motion applications (e.g., preset scan, tour and auto scan modes).

Pelco will warranty all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair). Goods returned for repair or credit should be clearly identified with the assigned CA/RA number and freight should be prepaid. All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

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